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FLEIT, KAIN, GIBBONS, GUTMAN, BONGINI & BIANCO P.L. 551 N.W. 77TH STREET, SUITE 111 BOCA RATON, FL 33487			PHAN, HUY Q	
			ART UNIT	PAPER NUMBER
			2687	

DATE MAILED: 10/18/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/649,756

Applicant(s)

DORENBOSCH ET AL.

Examiner

Huy Q Phan

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 26 August 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-32 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-11 and 17-32 is/are rejected.
- 7) ☒ Claim(s) 12-16 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 08/26/04.
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: \_\_\_\_\_.

## DETAILED ACTION

### *Claim Rejections - 35 USC § 102*

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1-11, 18, 19, 25-29, 31 and 32 are rejected under 35 U.S.C. 102(e) as being anticipated by Kallio (US-2002/0147008).

Regarding claims 1 and 25, Kallio discloses a method and a computer readable medium (inherently to ones of MS 150' structure such as a memory or a removable Subscriber Identity Module (SIM) card [0024] in order for MS 150 performing its function properly) comprising computer instructions for performing the steps of:

detecting a signal from an egress portal (fig. 3, WMC 210 and [0039], Kallio describes that WMC 210 serves as a WLAN access point [0010]);

determining that a wireless device is moving from a coverage area of a first wireless communications system to a coverage area of a second wireless communications system in response to detecting the signal from the egress portal ([0040]);

initiating a registration sequence with the second wireless communication system if the wireless device is not registered with the second wireless communications system,

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in response to determining that the wireless device is moving from the coverage area of the first communications system to the coverage area of the second communications system ([0040] and [0026]); and

conducting one of a present and a subsequent call via the second wireless communication system ([0041] and [0053]-[0058]).

Regarding claims 2 and 26, Kallio discloses the method and the computer readable medium as recited in the rejections of claims 1 and 25 respectively, further comprising:

detecting a second signal from an egress portal (fig. 5, WMC 210 and [0039], Kallio describes that WMC 210 serves as a WLAN access point [0010]); and

determining that the wireless device is moving from a coverage area of a first communications system to a coverage area of a second communications system according to the order of signals received from the egress portal [0040].

Regarding claims 3 and 27, Kallio discloses the method and the computer readable medium as recited in the rejections of claims 1 and 25 respectively, wherein the first wireless communication system is a wireless local area network (WLAN) (fig. 3, WLAN 200) and the second wireless communication system is a wide area network (WAN) (fig. 3, GSM 100) [0053].

Regarding claim 4, Kallio discloses the method as recited in the rejection of claim 3, wherein the wireless local area network (WLAN) uses at least one protocol of IEEE Standard 802.11 and Bluetooth [0023].

Regarding claim 5, Kallio discloses the method as recited in the rejection of claim 3, wherein the wide area network (WAN) uses at least one protocol of code division multiple access (CDMA), wideband code division multiple access (WCDMA), time division multiple access (TDMA), global system for mobile communications (GSM) and integrated digital enhanced network (iDEN) [0023].

Regarding claim 6, Kallio discloses the method as recited in the rejection of claim 1, wherein the first wireless communication system is a wide area network (WAN) (fig. 4, GSM 100) and the second wireless communication system is a wireless local area network (WLAN) (fig. 4, WLAN 200) [0043].

Regarding claim 7, Kallio discloses the method as recited in the rejection of claim 6, wherein the wireless local area network (WLAN) uses at least one protocol of IEEE Standard 802.11 and Bluetooth [0023].

Regarding claim 8, Kallio discloses the method as recited in the rejection of claim 6, wherein the wide area network (WAN) uses at least one protocol of code division multiple access (CDMA), wideband code division multiple access (WCDMA), time

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division multiple access (TDMA), global system for mobile communications (GSM) and integrated digital enhanced network (iDEN) [0023].

Regarding claim 9, Kallio discloses the method as recited in the rejection of claim 1, wherein the egress portal comprises at least one of a Bluetooth access point, an infrared transmitter, an electronic security detection device, and a second consecutive wireless local area network (WLAN) border cell (fig. 1, WMC 210, Kallio describes that WMC 210 serves as a WLAN access point [0010]).

Regarding claims 10 and 28, Kallio discloses the method and the computer readable medium as recited in the rejections of claims 1 and 25 respectively, wherein the detecting a signal from an egress portal step is in response to detecting a triggering event [0035].

Regarding claims 11 and 29, Kallio discloses the method and the computer readable medium as recited in the rejections of claims 10 and 28 respectively, wherein the triggering event comprises at least one of detecting a wireless local area network border cell, detecting a degradation in signal quality, and detecting a start of a call [0035].

Regarding claims 18 and 31, Kallio discloses a method and a computer readable medium (inherently to ones of MS 150' structure such as a memory or a removable

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Subscriber Identity Module (SIM) card [0024] in order for MS 150 performing its function properly) comprising computer instructions for performing the steps of:

- detecting a triggering event [0039];

- detecting a signal from an egress portal in response to detecting a triggering event [0040];

- obtaining available wide area network information from a wireless local area network access point (fig. 3, WMC 210 and [0039]-[0040], Kallio describes that WMC 210 serves as a WLAN access point [0010]); and

- scanning for at least one wide area network listed in the available wide area network information [0041].

Regarding claims 19 and 32, Kallio discloses the method and the computer readable medium comprising computer instructions for performing the steps of as recited in the rejections of claims 18 and 31 respectively, wherein the triggering event comprises at least one of detecting a wireless local area network border cell, detecting a degradation in signal quality, and detecting a start of a call [0040].

3. Claims 23 and 24 are rejected under 35 U.S.C. 102(e) as being anticipated by Chaskar et al. (US 2004/0137902).

Regarding claim 23, Chaskar et al. disclose a mobile communication system comprising:

a structure having at least one entry/exit point (fig. 2, front door and parking door; see [0045]);

at least one egress portal located at the at least one entry/exit point, the egress portal for transmitting signals to a mobile communications device (fig. 2, WLAN AP with border bit = 1; see [0045]);

at least one cell of a wireless local area network communications system, the cell providing communication coverage within the structure (fig. 2, WLAN cells);

at least one coverage cell of a second communications system, overlapping the at least one cell of a wireless local area network, for providing communication coverage outside the structure (fig. 2, cellular base station coverage); and

at least one mobile subscriber device (fig. 2, mobile terminal), communicatively coupled with the at least one cell of the wireless local area network communications system, and the at least one cell of the second communications system, the device for determining when to handover from one wireless communication system to the second wireless communication system in response to determining that the device has received signals from the at least one egress portal [0057]-[0060].

Regarding claim 24, Chaskar et al. disclose a mobile communication system as recited in the rejection of claim 23, further comprising: at least one border cell of a wireless local area network communications system, the border cell located at the entry/exit point of the structure (fig. 2, WLAN AP with border bit = 1; see [0045]),



providing a transition region between the wireless local area network communications system and the second communications system ([0057]-[0058]).

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 17 and 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kallio in view of Chaskar et al.

Regarding claims 17 and 30, Kallio discloses a method and a computer readable medium (inherently to ones of MS 150' structure such as a memory or a removable Subscriber Identity Module (SIM) card [0024] in order for MS 150 performing its function properly) comprising computer instructions for performing the steps of:

determining that a wireless device (fig. 2, MS 150), operating in a first communication system is detecting a wireless local area network border cell [0035];

initiating a registration sequence with a second wireless communication system in response to determining that the wireless device is detecting a wireless local area network border cell [0036] and [0026];

determining that the wireless device is moving from a coverage area of the first communications system to a coverage area of the second communications system in

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response to detecting a second wireless local area network border cell ([0036]-[0037]);  
and

conducting one of a present and a subsequent call via the second wireless communication system ([0036] and [0050]).

But, Kallio fails to expressly teach detecting a second wireless local area network border cell within a predetermined amount of time. However in analogous art, Chaskar et al. teach detecting a second wireless local area network border cell within a predetermined amount of time [0057]. Since, Kallio and Chaskar et al. are related to the method for handover between WAN and WLAN; therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of Kallio by specifically detecting a second wireless local area network border cell within a predetermined amount of time as taught by Chaskar et al. for purpose of minimizing unnecessary signaling traffic and quick handover may cost the benefit of cheaper access.

6. Claims 20-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kallio in view of Hyvarinen et al. (US-2002/0085540).

Regarding claim 20, Kallio discloses a mobile communication device comprising:  
at least two transceivers (fig. 1, WMC 210 and BTS 112), each transceiver desired to operate on a separate wireless communications system, for transmitting and receiving wireless information ([0026]-[0030]);

a controller (inherently to ones of MS 150' structure such as a processor in order for MS 150 performing its function properly), communicatively coupled to each transceiver, for managing the operation of the mobile communication device ([0010]-[0013]);

a means (inherently to ones of MS 150' structure such as a receiver in order for MS 150 performing its function properly) for receiving signals from an egress portal (fig. 3, WMC 210 and [0039], Kallio describes that WMC 210 serves as a WLAN access point [0010]); and

a handover manager [0054] (inherently to ones of MS 150' structure in order for MS 150 to determine the need for a handover), communicatively coupled to the controller, and the means for receiving signals from an egress portal, the handover manager for determining when to handover from the first wireless communication system to the second wireless communication system in response to determining that the means for receiving signals from an egress portal has received at least one signal from the egress portal (fig. 5, WMC 210 and [0053]-[0054], Kallio describes that WMC 210 serves as a WLAN access point [0010]).

But, Kallio does not particularly show a first wireless communications system stack, communicatively coupled to the controller, having instructions for communicating according to its respective protocol; and a second wireless communications system stack, communicatively coupled to the controller, having instructions for communicating according to its respective protocol. However in analogous art, Hyvarinen et al. teach a first wireless communications system stack, communicatively coupled to the controller,

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having instructions for communicating according to its respective protocol (fig. 3 and [0021]-[0026]); and a second wireless communications system stack, communicatively coupled to the controller, having instructions for communicating according to its respective protocol (fig. 3 and [0021]-[0026]). Since, Kallio and Hyvarinen et al. are related to the method for handover between WAN and WLAN; therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of Kallio by specifically having the first wireless communications system stack, communicatively coupled to the controller, having instructions for communicating according to its respective protocol and the second wireless communications system stack, communicatively coupled to the controller, having instructions for communicating according to its respective protocol; as taught by Hyvarinen et al. for purpose of allowing the wireless device of capability to operate in both communication networks advantageously without modifying the hardware or software of any individual network.

Regarding claim 21, Kallio and Hyvarinen et al. disclose the mobile communication device as recited in the rejection of claim 20. Hyvarinen et al. further disclose wherein the at least two transceivers share common hardware (antenna, circuitry, memory) and software [0026].

Regarding claim 22, Kallio and Hyvarinen et al. disclose the mobile communication device as recited in the rejection of claim 20. Kallio further disclose

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wherein the means for receiving signals from an egress portal comprises at least one of a Bluetooth transceiver, an infrared sensor, and an electronic security detection device [0023].

### ***Allowable Subject Matter***

7. Claims 12-16 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Regarding claims 12-16, the applied references fail to disclose or render obvious the claimed limitations of determining that a border cell indicator of the status information being set.

### ***Conclusion***

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- a) Jiang et al. (US-2004/0114553) disclose a method for handover between CDMA2000 and WLAN.
- b) Hsu et al. (US-2004/0176024) disclose a method for detecting and selecting WLAN.
- c) Harrison et al. (US-5,796,727) disclose WWAN and WLAN access.
- d) Sundar et al. (US-2003/0134650) disclose a method for handover between WWAN and WLAN.

- e) Krishnamurthi et al. (US-2003/0174667) disclose a method of desirable access.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Huy Q Phan whose telephone number is 703-305-9007. The examiner can normally be reached on 8AM-6PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kincaid G Lester can be reached on 703-306-3016. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Examiner: Phan, Huy Q.

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Date: Oct. 15, 2004

  
SONNY TRINH  
PRIMARY EXAMINER